CLEAN VESSEL ACT EDUCATION AND OUTREACH GRANT PROGRAM

APPLICATION SUMMARY

1. Applicant Organization: The San Francisco Estuary Partnership / Association of Bay Area Governments

2. Name and Title of Contact Person: James Muller, Program Manager

3. Address:
San Francisco Estuary Partnership
1515 Clay Street, Suite 1400
Oakland, CA 94612

4. Telephone: (510) 622-2406, Fax: (510) 622-2501
Email: jamuller@waterboards.ca.gov

5. Website: http://www.sfestuary.org/boating

6. Geographic location targeted by your grant proposal:
☒ The 11-county San Francisco Bay Delta Estuary or ☐ the 5 Southern California Coastal Counties

7. Brief Project Summary:
The San Francisco Bay Clean Vessel Act Program will focus on direct boater outreach through boat shows, presentations, and events and will increase the capacity of marina operators to proactively prevent sewage discharge with a Best Management Practices Manual. SFEP will monitor the San Francisco Bay-Delta Pumpout Network quarterly and will develop a new app to streamline surveys and increase quality control for the data.

8. Number of people who will be directly served by the project (estimate): 1,100 boaters, harbormasters and marina managers.

9. Requested amount: $281,989

10. Total project budget: $430,297

11. Is your organization a ☐ non-profit corporation? ☒ government agency? ☐ Other

12. Proposal prepared by: James Muller, Title: Program Manager

Under penalty of perjury, I certify that all information represented in this grant application and supplemental documentation is accurate and true.

Signature  Date: 02/02/2015

Background/History

The San Francisco Estuary Partnership (SFEP) has been working with the State of California Division of Boating and Waterways (DBW), The Bay Foundation, and a vast array of partners in the San Francisco Bay (Bay) and Sacramento Delta (Delta) for two decades to promote clean boating and environmental stewardship to boaters and marinas in the 11 county San Francisco Bay Delta Estuary. This 20 year old program has been funded by the Clean Vessel Act with the 25% match being contributed by a combination of sources including volunteers, cost sharing, and administrative support from the Association of Bay Area Governments, our fiscal agent.

During the first 14 years, our program focused exclusively on public education and resource development, and since 2008, SFEP has also conducted a regional pumpout monitoring program. As of today, SFEP has attended over 40 boat shows, and distributed over 250,000 maps to the public at these shows and through annual mail-outs to marinas and boating supplies stores. In addition, SFEP has given over 50 clean boating presentations to marinas, yacht clubs, and boating groups ranging from 10 – 100 participants. In addition to our participation at events and production of printed material, SFEP has worked with DBW to create three clean boating videos on the subjects of oil, fuel, and sewage that have been viewed more than 6,600 times since the first video's upload in 2011.

For the past 6 years we have been monitoring approximately 90 pumpouts in the Bay and Delta for their use and condition. The relational database we have developed currently has over 2,600 entries. In addition to collecting information, SFEP also notified marinas of broken or malfunctioning pumpouts, ensured that all pumpouts monitored had the proper signage and that the DBW QR sticker was placed on each unit.

Most recently, SFEP has been conducting mobile pumpout events to engage the public in new settings and using new techniques. These events, called Honey Pot Days, serve to introduce boaters to the mobile pumpout service industry in a safe and controlled environment for free and also allow staff to provide participants with clean boating information. To date, these events have prevented over 8,800 gallons of sewage from entering California's waterways from a total of 278 vessels.

Project Description

Goals

1) In the 11-county San Francisco Bay Delta Estuary:
    a. Increase awareness among boaters of the impacts of sewage discharge and waste management alternatives to overboard discharge
    b. Monitor and assess the use and condition of pumpout stations
    c. Increase the capacity of marinas to proactively address sewage through education and management practices
2) Share products to other regions of California and other States to promote the aforementioned goals on a national level
3) Increase information about CVA grant funding for marinas for pumpout installation and maintenance

Objectives

1) Educate boaters one on one, in groups, and at events and boat shows on the effects of improper sewage disposal in the San Francisco Bay and Sacramento Delta, the locations of pumpouts in the 11 county region, and mobile pumpout options – Objective to be accomplished utilizing the outreach plan as described below. This objective will accomplish Goal 1a.
2) Create a new resource for marinas to reference that has management practices and programs used in other parts of the state that can be easily and effectively used and referenced to employ sewage reducing techniques at their marinas - Objective to be accomplished by completing the BMP program element described below. This will accomplish Goal 1c.
3) Expand the use of mobile pumpouts as a viable alternative to dock side pumpout stations and overboard discharge – Objective to be accomplished by completing the Honey Pot Day and Mobile Pumpout Pilot program elements described below. This will accomplish Goal 1a.
4) Conduct 6 quarterly surveys to monitor the pumpout network in the 11 county San Francisco Bay Delta Estuary. Objective to be accomplished by completing the Pumpout Monitoring program element described below. This will accomplish Goal 1b.
5) Work with marinas that have no pumpout station to obtain CVA funds to install new stations. Objective to be accomplished by completing the Pumpout Network Enhancement program element described below. This will accomplish Goal 3.
6) Attend the States Organization for Boating Access (SOBA) meeting in 2015 and 2016 to share drafts and final BMP Manual and Pumpout Monitoring App with other states and regions. This is intended to proliferate products and to allow other states access to them. These conferences will also serve to inform the tools as they are in their draft phases. Presentations will be made at each conference. This will accomplish goal 2.

Educational Component

SFEP's multifaceted educational campaign will focus on in person direct boater education, capacity building for marinas, and pumpout network enhancement within the 11 County San Francisco Bay and Sacramento Delta Estuary. The combination of boater and marina education and capacity building will serve to address the complex nature of sewage discharge by providing boaters with the information they need to make correct decisions and provide marinas with the tools they need to work with boaters to proactively prevent sewage discharge. General descriptions including outreach tools used, events, information on reports used to outline outreach plans, and a description of our main outreach document, will be found in this section. Step by Step descriptions and timelines are located in the Task List. The education and outreach components will be evaluated as outlined in the Evaluation Plan below.

Boater Community Education

SFEP will pursue multiple avenues to educate boaters on the effects of sewage discharge and how to dispose of their waste properly. The DBW 2011 California Boater Survey Report (Survey Report) has statistically shown that boaters get a majority of their information from Marinas and Boat Shows with a significant number of boaters getting their information from boating magazine publications. SFEP will take advantage of these opportunities to educate boaters by attending all three major boat shows in Northern California: the San Francisco Boat Show, Sacramento Boat Show, and the Strictly Sail in Jack London Square. In order to enhance the program's visibility and to reinforce CVA's message, SFEP will

design a new standing banner highlighting the components of the program, as well as displaying critical information and messages for boaters.

SFEP will also continue to sponsor Honey Pot Day events in the Delta as they have been very successful in providing information to boaters on clean boating practices and introducing boaters to mobile pumpout services as a viable alternative to dockside pumpouts. These on-water events have allowed SFEP staff to educate boaters recreating in the delta on the effects sewage has on the very waters they are recreating in at the time. The Honey Pot Day events have also been very positively received by boaters as they provide a needed service to boaters at no cost to them. In addition to education, this component of our program will ensure sewage is not discharged from the vessels we work with. As of today, this program has serviced 278 vessels and prevented almost 9,000 gallons of sewage from being discharged into the waterways of California. SFEP will plan and host 4 Honey Pot Days during the 18 month grant period.

In addition, SFEP will extend its outreach visibility and increase its targeted audience by presenting to boating groups at marinas and yacht clubs, and by pursuing opportunities to write articles for Boat US, Latitude 38, Changing Tides, Slack Tide, and others. The presentations and articles will include information about Y-Valves, MSD types, environmental regulations, and environmental impacts of dumping sewage. Outreach staff will also distribute resources to boaters (including DBW's clean boating information), and let participants know how marinas can attain funding to repair or replace pumpouts. These audiences will be recruited by working with the Pacific Inter Club Yacht Association and DBW's Clean Boating Program.

As reported in the Survey Report, there is still a gap in knowledge of sewage pumpout locations. SFEP will distribute its Pumpout Guide and Map for Boaters at Boat Shows, Honey Pot Days, and at presentations to supplement educational opportunities and to address this gap in knowledge. The Pumpout Guide and Map for Boaters has been SFEP's primary informational publication and has been distributed for over a decade. This resource is readily recognizable by marina staff and boaters alike. It features a guide section that has recently been redesigned for a more logical flow and grouping of topics and to include more detailed information on Y-Valves, MSD types and regulations. It features DBW's clean boating "dump at the pump" messaging and information about the CVA grant. It also has a map of marinas that have pumpouts and includes pumpout specific information including location in the marina, hours of operation, contact information, and cost. Boaters will be exposed to this publication and its contents when SFEP conducts any of its outreach activities.

Marina Capacity Building

This component of our education campaign will increase the ability of marinas to implement preventative programs to address sewage. The list of Best Management Practices (BMP's) and the technical appendix supplied by SFEP at the end of the current contract's 2015 extension will be expanded into a full Manual for marina operators wishing to proactively address sewage discharge. This report will be written with support from the TAC and our Southern California partners, The Bay Foundation. The goal of this Manual is to have a resource available to marinas in California that wish to implement sewage prevention programs and to supply the manual to other State's CVA grant managers for their use and adaptation. Staff will request presenting this project at the SOBA conference in 2015.

Once the Manual has been completed and approved by DBW, a limited number will be printed for marinas to be supplied upon request. Also, a PDF version will be available for download on the SFEP Boating webpage[1]. SFEP will work with stakeholders statewide to ensure Marinas and Harbors in California are aware of this resource. By providing technological and programmatic BMP's, SFEP can increase the capacity for marinas to proactively address sewage and also address the need for more pumpouts as indicated in the Survey Report.

Pumpout Network Enhancement

SFEP will work with marinas that do not currently have pumpout systems, or ones that are chronically broken, to inform them of the CVA grant funds available to them for pumpout installation and maintenance. SFEP will work with Bay marinas, but will focus most of its time in the Delta as the Survey Report indicated that boaters encountered more broken and closed pumpouts in that region. By increasing the number of operational pumpouts in our Bay Delta region, SFEP can increase the capacity for marinas to proactively address sewage. SFEP will utilize monitoring visits, described below, and follow up communication to facilitate this effort.

Monitoring Component

Background

SFEP will continue to monitor the pumpouts in the 11 county San Francisco Bay Delta Estuary. This monitoring component will help DBW and SFEP continue to determine the status, condition and usage of pumpout stations in the pumpout network. Keeping track of these parameters allows DBW and SFEP staff to assist in expediting pumpout repair, provide data about pumpout systems, and target CVA funding outreach efforts.

The phrase "pumpout network" refers to all of the pumpouts as a group within the San Francisco Bay and Sacramento-San Joaquin River Delta. By monitoring this network, SFEP can expedite the repair of broken pumpouts and can also let operators know about pumpout issues that may have been missed by marina staff. While some marinas and harbors monitor their own pumpout systems regularly and repair them as needed, SFEP provides a level of regional monitoring that the marinas themselves cannot provide. During our site visits, we are able to gather information that can be used to understand the network as a whole. When we visit the marinas to conduct the quarterly inspections of the pumpouts, we are also able to inform marinas about the various benefits that the grant offers. Most notable is the 75% cost coverage for any maintenance, replacement of parts, or new pump installation. Once marinas know about these opportunities, they can then get in contact with DBW to get more information and to begin the grant application process. Beginning in 2015, SFEP will begin leaving postcards on a quarterly basis at surveyed marinas to inform them about their pumpout's status, readings and trends. This will further assist DBW and SFEP in expediting pumpout repair.

Methods

Since 2008, SFEP has gathered information about the effectiveness of the pumpout network through in-person site visits. In the last five years we have conducted around 2,000 surveys during four annual quarterly site visits of about 90 pumpout stations in the 11 counties of the San Francisco Bay Delta

[1] http://www.sfestuary.org/boating

Estuary. Steven Cochrane, SFEP's surveyor, has been monitoring pumpout stations for seven years (See the Key Staff section on page 14). His experience allows him to visit all of the marinas in a short period of time, usually two to three weeks, once every quarter (March, June, September, and December).

The number of marinas surveyed has varied by year depending on additional units being installed and units being removed. The survey trips are multipurpose in that Steven is checking the equipment functionality and use as well as installing meters onto the motors that do not already have them after permission is granted. When we began surveying marinas in 2008, our initial visits were primarily to gain access, check status, and install equipment when necessary. Since then, we have installed meters on a majority of the pumpouts that did not have them and are building a robust database for future in-depth analysis. In 2011, 74 pumpout stations had meters installed. At the end of 2012, this number went up to 87. At locations that had badly damaged nozzles, universal nozzles with backflow flaps were given to marina operators. This helped to ensure that the boaters using the pumpout network were not deterred by collapsing nozzle tips that commonly impede flow. In this task, Steven will work with to marinas that do not have the proper signage to obtain it and will continue to replace hour meters if they stop operating. The data gathered from these visits includes the following:

Marina Information

- Contact information: mailing address, phone number and email of the manager.
- Location of pumpout station(s).
- Hours of operation.
- Pumpout cost.
- Portapotty dumpout availability.
- Public restroom availability.
- Pumpout Guide & Map distribution #.

Pumpout Information

- Is it grant funded? If yes, what year?
- Pumpout make and model.
- Is there a meter installed?
- Is it operational? If not, why?
- Condition of hose, nozzle, sight glass, backflow flap, and pedestal.
- Condition of On/Off buttons.

Signage Displayed

- Universal symbol.
- State funding credit signage.
- Instructions.
- Hours of operation.
- Cost of pumpout (if any).
- Contact in case of problems.
- On/Off button indicators.

Readings

- Meter reading.
- Time to pump 5 gallons.
- Vacuum pressure.
- Notes regarding the condition/signage or other comments about the pumpout.
- Distance from hose to motor.
- Availability and funding source of automated monitored system.

Actions Taken if Needed

- SFEP inspector installs meters with marinas approval, when needed.
- SFEP inspector replaces or assists the marina in replacing missing or broken pumpout parts.
- SFEP staff or inspector notifies marinas of malfunctioning pumpouts and funding available to repair or replace systems.

This data is subsequently logged into the existing Microsoft Access relational database (See attachment 2 for a sample of the quarterly survey). The survey data is supplemented by monthly meter readings, from a subset of surveyed marinas, sent in via email by harbormasters and marina managers. These readings will be reviewed and compared to previous data to ensure quality control and quality

assurance. For marinas willing to submit the monthly email readings we will have two sources of usage data, increasing the quality control and quality assurance of that data set. As of the end of 2014, the number of entries in the Access Database is 3,020, with 2,070 surveys resulting from in person visits, and 950 monthly reading sent on a voluntary basis by harbormasters and marina managers. See attachment 2 for a list of active pumpout stations that are surveyed once per quarter.

Pumpout Monitoring App

Currently, the SFEP surveyor fills out a paper survey sheet when visiting each marina. These surveys (about 90 per quarter) are then manually input into the Access Database, which takes significant staff time and can result in errors that are detected during our quality assurance and quality control process. There are significant amounts of time and resources put into this process that can be reduced. To streamline the process and reduce the environmental impact of monitoring, SFEP will develop an application that will allow the surveyor, as well as harbormasters participating in the voluntary data collection, to input readings and other qualitative information using their smartphone, iPad, or web browser. The application will send the information mentioned above to the already existing Microsoft Access database in real time. This app will be the property of DBW and is intended to work for monitoring programs statewide. This new app can even be shared with other state's CVA programs to encourage monitoring programs and to streamline those already in place.

The Pumpout Monitoring application will facilitate the work of SFEP inspector by providing him with a simple interface displaying accurate and recent information from the previous surveys. The application will automatically input time and location, and will help keep track of the nozzle and meter parts that are needed. The application will also give the opportunity to the inspector/harbormasters to take pictures of the pumpout to record damage and other relevant information. Photos taken through the app will be stored in an organized system that will allow DBW and SFEP staff to easily find media related to any particular pumpout of interest.

The design of the application will be developed in coordination with the SFEP inspector to make it an efficient and a valuable tool for him. During the process, we will also share the design with harbormasters and marinas managers that are participating in the monthly data reading. Once a pilot version of the app is available, we will test it here in the San Francisco Bay Delta area before presenting it to the other regions and other state CVA programs. This final product will be presented during the 2016 SOBA Conference.

Mobile Pumpout Pilot

In a hybrid education/monitoring effort to assist marinas and boaters to overcome the difficulty in managing sewage and to protect the water quality of the San Francisco Bay Delta Estuary, SFEP will create a detailed plan for a publically funded mobile pumpout program that can be piloted in the Oakland Estuary, similar to the CVA funded mobile pumpout program in Connecticut. This plan would act as a model for implementation throughout the state where stakeholder interest was significant enough to support such a program. This plan will include an analysis of the financial requirements, funding and matching opportunities, implementation plans, logistical details, and an assessment of local stakeholder interest in the Oakland Estuary. This plan will also include details on what information would be collected by the mobile pumpout companies during the pilot to support pumpout monitoring

efforts and future funding. The educational portion of this effort would include working with marinas and boaters to increase awareness of such a program were it to be funded and implemented.

The benefits of a mobile pumpout program are varied, significant, and would further the Sport Fish and Wildlife goal of reducing sewage discharge into the waters of the US. Although a regional, long term, publically funded mobile pumpout program has never been implemented in California, SFEP believes it can be funded by CVA grants in the future. In addition to the program precedent in Connecticut, the WSFR CVA Fact Sheet (August 2014) states that projects involved with holding and transporting sewage are considered eligible for funding. In addition, this type of program would address the two most frequent obstacles to dock side pumpout use as reported in the DBW Survey Report; lines at the station and broken pumpouts.

Project Details

Please see the Education Component section (Page 3) and the Monitoring Component section (Page 5) for a detailed project description. These sections include targeted audiences, personnel involved and outreach opportunities. Step by Step descriptions can be found in the Task List, below, with timelines for each task and its components.

Evaluation Plan

Many of the elements of this proposal are built from past successes, achievements, and evaluations. In particular, the DBW 2011 Survey Report assessed the knowledge, characteristics, and habits of boaters throughout the state of California. This report analyzed the responses of 5,735 boaters collected from 2007 – 2009. This report's results were used to inform much of the outreach component of this proposal and SFEP will support DBW in its continued efforts, where possible, to collect this data. However, due to the comprehensive nature of this report, in depth evaluation of some components of this proposal would not be appropriate as DBW Evaluation Guide[2] suggests, due to the limited value added for such an effort.

The Boater Outreach and Education program will evaluate the various efforts undertaken during the grant period formatively and summatively. Formative evaluation is done during a project to evaluate the effort and to provide opportunity to administer corrective action. This project will use a Technical Advisory Committee to review product driven efforts. Summative evaluation is intended to evaluate the outcomes and impacts of project elements for their effectiveness and success. The final report and pumpout report will be used as platforms to provide these evaluation results.

The formative evaluation, hereafter referred to as the Technical Advisory Committee (TAC), will be used to solicit input on the Best Management Practices Manual, and Mobile Pumpout Pilot Plan. These efforts have discrete deliverables that will be submitted to DBW towards the end of this grant, making a summative evaluation uninformative and inappropriate. By convening a TAC composed of industry experts, stakeholders, and regulators, SFEP can solicit feedback on these components to ensure the end products are useful and will meet the goals and objectives of the project. These TAC members will be

[2] http://www.coastal.ca.gov/publiced/plate/wtevaluation.pdf

convened once during this grant period in 2016 and will have opportunities to provide feedback on these efforts throughout the project as appropriate. Notes from the TAC will be provided to DBW as well as SFEP's response to the evaluation and corrective actions taken meant to incorporate evaluation results.

The summative evaluation will be used to assess the outcomes and successes of our outreach, monitoring, and network enhancement tasks. As previously stated, an in depth summative evaluation of outreach techniques for the boating community has already been done, and our direct boater outreach effort is built to maximize the opportunities highlighted in the results of this report. Our evaluation will focus on the number of boaters reached at boat shows, presentations, and on the number of publications we publish. The network enhancement effort will assess the effectiveness of SFEP's efforts to increase the number of publically funded pumpout stations and maintenance programs, and the increase of pumpout stations as a result of this work. Metrics to be considered and reported include the number of marinas contacted, marinas interested, grant applications submitted as a result of our work, and the number of marinas that seek additional funding, even outside CVA funding, to install systems. Our Honey Pot Days will include slightly more in depth evaluation as it exists outside of the realm of metrics assessed by DBW in 2011.

Honey Pot Days will be evaluated using data collected during the events including the number of vessels serviced, boaters participating, outreach materials distributed, and quantity of sewage properly disposed of. SFEP will also ask boaters to take a survey after the service is administered to gage behavior change. There will be a section in this service for qualitative feedback in addition to the yes/no type answers that boaters will respond to for quantitative analysis. These responses will be analyzed and conclusions will be included in the final report.

Our monitoring efforts will be evaluated in a final Pumpout Report to be submitted to DBW at the end of our grant period. This report will analyze the use and condition of the Bay Delta pumpout network. It will also include an evaluation of the success of SFEP to enlist more marinas to participate in the monthly meter readings.

These evaluation efforts will be fine-tuned with DBW grant managers to ensure outcomes and successes of the program goals and objectives are adequately evaluated and reported on. In addition, DBW grant managers will be active participants on our Technical Advisory Committee meeting and will have the opportunity to review a draft of our final and pumpout reports before their final submission. The results of these evaluations will be used to adaptively manage product driven elements and will inform DBW on various successes and lessons learned that can be applied to future outreach efforts.

Task List and Timeline

1) **Direct Boater Outreach**
    a. Boat Shows
    SFEP will participate in three boat shows in 2016 including: The San Francisco Boat

Show, Sacramento Boat Show, and the Strictly Sail in Jack London Square to conduct outreach consistent with the messaging described above and to distribute informational materials. Staff will work with show organizers to ensure booths are close, or combined with DBW's booth to ensure comprehensive clean boating messaging. Volunteers recruited through DBW, Coast Guard Auxiliary and other organizations, will be assisting staff with shows to increase outreach potential. SFEP will also design and manufacture a new single panel banner display with the most recent Parks and DBW logos, relevant photos, clean boating messages, and the QR code to access educational materials online. We anticipate a banner size of about 3 feet wide and about 6 feet tall. We will prospect for recyclable components, like aluminum pedestal, and recyclable printed vinyl.

Timeline:

2015 Q3: First design, feedback from DBW.
2015 Q4: Final design, DBW approval, call for bids from manufacturers.
2016 Q1: Banner manufactured and sent to SFEP, SF Boat Show, Sacramento Boat Show.
2016 Q2: Strictly Sail.

b. Honey Pot Days

SFEP will partner with mobile pumpout companies in the Delta to host at least 4 Honey Pot Days to provide pumpouts to boaters with the goals of preventing sewage discharge, educating boaters on the impacts of sewage and how do dispose of it, providing them with informational material, and to introduce them to a viable alternative to pumping out dockside. SFEP will provide DBW with the number of vessels pumped out, vessel information, number of boaters participating, and gallons of sewage pumped. Staff will select dates in the summer boating season to ensure maximum visibility and to ensure event goals are met. A mobile pumpout vendor will be selected based on availability, rate, and match contribution. SFEP staff will work with the selected vendor to ensure the boaters information is captured, and that they receive the clean boating messaging outlined in the Project Description section. All event results will be reported to DBW.

Timeline:

2015 Q3: One HPD Event.
2016 Q2: Two HPD Events.
2016 Q3: One HPD Event.

c. Clean Boating Presentations

SFEP will partner with DBW to present a comprehensive clean boating message to boating groups including marinas and yacht clubs. The Pacific Inter Club Yacht Association will also be partnered with to solicit willing Yacht Clubs for presentations. SFEP will present to at least 3 groups and will provide DBW with the number of participants per event and informational materials distributed.

Timeline:
2015 Q3 - 2016 Q4 (exact dates depend on availability of clubs and groups to meet).

d. Publications
SFEP will work with an array of magazines, agencies, and marinas to publish at least four articles about program achievements, topics related to the CVA, and the environment. These articles may be published in, but are not limited to: Boat US, Latitude 38, Slack Tide, Changing Tide, and Estuary News. SFEP has a long relationship with Latitude 38, Slack Tide and Changing Tide publications and will draw on those to publish these articles. Boat US and other publications will be contacted to discuss the opportunities for articles and SFEP will partner with The Bay Foundation and DBW when able to help facilitate these opportunities.
Timeline:
2015 Q3 - 2016 Q4 (Exact dates depend on availability of publications to house articles).

e. Pumpout Network Enhancement
SFEP will work, over the 18 month period, to increase the number of grant funded pumpouts in the San Francisco Bay and Sacramento Delta. SFEP will utilize its partnerships with the MRA, CAHMPC, and the Clean Marinas Program to encourage marinas to install these systems. In addition, SFEP will select marinas with malfunctioning pumpouts (as noted on surveys) to contact regarding grant funding to repair them.
Timeline:
2015 Q3 - 2016 Q4: Work with marina operators to inform them of CVA funding opportunities to install or repair pumpout systems.

2) BMP Project

The list of BMPs and the technical appendix supplied by SFEP at the end of their 2015 extension would be expanded into a full manual for marina operators wishing to proactively address sewage discharge. It will include sample language, tracking forms, and turnkey programs. The manual will be shared with other State's CVA grant mangers for their use and adaption. Staff will request to present this project at the SOBA conference in 2015. Once the manual has been completed and approved by DBW, a limited number will be printed for marinas to be supplied upon request. SFEP will work with stakeholders statewide to ensure marinas and harbors in California are aware of the resource.

Timeline:
2015 Q3 - 4: Building upon the technical appendix supplied by SFEP at the end of their 2015 extension final considerations for BMP's will be solicited from partners and written into the manual. Product design and content outline will be provided to DBW for approval.
2016 Q1 - 2: SFEP will solicit feedbacks from DBW and the TAC throughout the drafting process.
2016 Q3 - 4: Final version, DBW approval, and release. A limited number will be printed for marinas to be supplied upon request. A PDF version will also be made available for download on

SFEP webpage and will be supplied to any organization, entity, marina, or boater that wishes it. Emails will be sent out to the MRA and CAHMPC to let them know of this final product.

3) Mobile Pumpout Pilot Plan

Create a detailed plan for a publically funded mobile pumpout program that can be piloted in the Oakland Estuary. This plan would act as a model for implementation throughout the state. This plan will include an analysis of the financial requirements, funding and matching opportunities, implementation plans, logistical details, and an assessment of local stakeholder interest in the Oakland Estuary. This plan will also include outreach requirements and details on what information would be collected by the mobile pumpout companies during the pilot to support future funding.

Timeline:
2015 Q3 - 4: Gather information from other programs, DBW's grant managers, and partners.
2016 Q1: Draft a first version of the plan in coordination with local stakeholders and feedback from the TAC and DBW.
2016 Q2 - 4: Final draft and DBW approval.

4) Pumpout Monitoring

SFEP will monitor all pumpouts at marinas in the 11 county San Francisco Bay and Sacramento Delta where access is granted, quarterly, from July 2015 to December 2016. This includes approximately 70 marinas containing 90 pumpouts, all of which are listed on the Pumpout Guide and Map for Boaters. To streamline this process, SFEP will develop the Pumpout Monitoring App to be used, after its development, to log surveys automatically into a database. This app will be shared with other California CVA programs and will be presented at the national SOBA conference. SFEP will create an annual pumpout usage report that we will submitted to DBW during the grant period.

Timeline:
2015 Q3 – 2016 Q4 – Monitor pumpout network quarterly and submit results to DBW in quarterly reports.
2015 Q3-4: SFEP will work with the pumpout surveyor to create an initial design and work with harbormasters that are part of the voluntary monthly pumpout readings to get input on their needs and preferences.
2016 Q1: DBW design approval, call for bids from app developers.
2016 Q2: App development, test and troubleshooting during the surveying.
2016 Q3: Final product with DBW approval, Presentation to other CVA grantee in California, and presentation of the App during the 2016 SOBA Conference.
2016 Q4: Write and submit final pumpout report.

5) Project Evaluation / Reporting

SFEP will develop a list of Technical Advisory Committee members to be approved by DBW that will meet at least once during the duration of this grant. These members will include marina and

harbor representatives, boating groups, government agencies, and other stakeholders. This TAC will be asked to review program components and deliverables. Participating TAC members will commit to a minimum number of hours to contribute to the program that can include the review of deliverables, feedback on program components, and the TAC meeting itself.

In addition to the TAC, SFEP will write quarterly reports to the Division of Boating and Waterways' Grant Mangers that will include summaries of all work completed during the reporting period on all tasks, a budget review, pumpout information collected during surveys, and any supplemental information relevant to the program. In addition, SFEP will submit a final report that will review the program in its entirety, including lessons learned, steps forward, and an evaluation of the project and its effectiveness at achieving its objectives and goals (more detailed information in section 4 – Evaluation Plan).

Timeline:
2015 Q3 - 2016 Q4: Quarterly reporting for periods ending March, June, September, December.
2016 Q2: Technical Advisory Committee.
2016 Q4: Write and submit final report.

6) **Project Administration**

SFEP will submit monthly invoices for all reimbursable project expenses, will manage contracts, all components of the San Francisco Bay Boater Education and Sewage Pumpout Monitoring Program, and oversee project staff. SFEP will also ensure that all necessary documentation is retained and available to DBW for auditing and tracking purposes.

Timeline:
2015 Q3 – 2016 Q4: All administrative duties including but not limited to accounting, invoicing, audit documentation and contract management.

Budget

If awarded, SFEP is willing to negotiate tasks and line item budgets to meet funder requirements. Please see attachment 1.

Resolution from Governing Body

Please see attachment 3.

Description of Applicant Organization

Organization

The Association of Bay Area Governments (ABAG) is the official Council of Governments (COG) representing the San Francisco Bay Area's nine counties and 101 cities and towns. Formed in 1961, ABAG holds the distinction of being the first Council of Governments in California and is the Bay Area's official regional planning agency. Its mission is to strengthen cooperation and coordination among local

governments and in doing so address social, environmental and economic issues that transcend local borders. The agency's innovative programs, projects, and partnerships have led to state, national, and international recognition for its award-winning research and analysis and cost-effective local government service programs.

The agency is governed by a General Assembly and Executive Board with standing and interagency committees. An elected official from each of the nine counties and 100 member cities and towns serves as a delegate to its General Assembly, which determines policy annually, adopts the annual budget and work program, and reviews the policy actions of ABAG's Executive Board. The 38-member Executive Board meets bimonthly to make operating decisions, appoint committee members, authorize expenditures, and recommend policy. The complete list of Executive Board officers and members and their occupations can be found at http://abag.ca.gov/overview/ExecBoard.html. They are not listed here due to the large number of members.

One of ABAG's key programs, the San Francisco Estuary Partnership (SFEP) provides leadership, partnering, coordination, and project implementation to restore and maintain the water quality and ecological integrity of the San Francisco Bay-Delta Estuary. The program implements projects to protect San Francisco Bay water quality and improve the condition of shellfish, fish and wildlife as well as estuarine habitats. SFEP also promotes the local and regional economies that increasingly rely on tourism, commercial and recreational fishing, commercial shipping, boating and other water-dependent industries.

The San Francisco Estuary Partnership (SFEP) will be the project lead, responsible for overall project management, budget, coordination, and reporting. SFEP brings extensive project management experience in coordinating large, multi-partner projects with documented environmental outcomes. For more than 15 years SFEP has coordinated complex and collaborative projects (typically federal and/or state-grant funded) designed to improve water quality in the Bay Area. SFEP/ABAG issues written sub-award agreements with carefully detailed work scopes, schedules, and deliverables, including required project progress reports that provide timely information on project outputs and outcomes. SFEP monitors project progress, costs, and achievements and works in close collaboration with sub-recipients and the funding agency to ensure projects are completed on time, within budget, and on target to achieve the desired environmental outcomes. SFEP has successfully managed more than 40 grants annually with an annual budget of over $20 million.

Key Staff

The key staff involved in this project includes James Muller and Adrien Baudrimont. James has been working with SFEP for the past 5 years to manage and implement environmental projects including the Clean Vessel Act funded Boater Outreach and Education Project. He has worked one on one with boaters at shows and events and has also presented clean boating information to groups of over 100 boaters. He has worked with marinas, harbors, agencies, volunteers, and organizations to create partnerships that work to advance the clean boating message and educate boaters. He also brings management experience into this project and has managed grants with over $4.9 million budgets that focused on public education, ecosystem restoration, pollutant remediation, invasive species control,

local governmental policy change, low impact development, and disadvantaged communities. James brings a technical background as well as robust management and public outreach experience to this project.

Adrien Baudrimont has been working with SFEP for the past 2 years as an Environmental Planner. Adrien managed the San Francisco Creek Mouth Assessment Project, as well as the SFEP Small Grant Program before taking an active role in the Boater Outreach and Education Program. Before joining the Partnership, Adrien worked for several cities in Europe as a consultant in urban planning and sustainable development. Adrien has a Master in Geography and a Master in Urban Planning from the University of Paris Sorbonne.

Steven Cochrane, SFEP Surveyor: Steven has an extensive experience in collecting field data, entering data into field forms, hand held devices and spreadsheets. Previously a water quality monitor at Hayward Shoreline Interpretive Center, Steven conducts data quality control, quality assurance and equipment accuracy tests. Also, Steven has a 20 year experience using maps, GIS and locating field sites through his regional work as a Bay Area naturalist. In addition, Steven is experienced in working with stakeholders on environmental issues such as water quality, erosion control and bacteria in local watersheds.

Selected List of Grant Projects

Contract Number	Name of Project	Begin/End Dates	Project Budget
744-107-00	DBW-OUTREACH	05/01/01-06/30/15	$2,721,101
WS-96932601-0	EPA-WCEI_Green Infill	10/01/08-09/30/2015	$996,495
X7-00T04701-0	EPA-Estuary 2100	03/01/09-02/29/2016	$4,922,000
CD-96925701-0	EPA- Stream 3	10/01/08-06/30/14	$297,800
09-670-552	SWRCB-Hicks Flat Remediation	02/01/10-12/31/2013	$315,000
EM-00T34101-0	EPA-Estuary 2100-Phase 2	03/10/10-12/31/2016	$3,613,704
E1083005	DFG- IRWM Analysis	12/07/10-06/30/14	$420,000
ASC 951	Aquatic Science-Wetland Policy	06/01/11-07/31/2014	$100,000
W9-00T68901-0-1	San Pablo Stormwater Spine	10/01/11-01/31/2015	$307,646
11-PML-G001	DPR-Got Ants?	01/24/2012-03/30/2014	$200,000
11-300-809	DBW- Reg Sed Mgnt	05/07/12-6/30/2014	$49,999.35
4600009715	DWR-IRWM Green Infrastructure	08/16/11-09/30/2016	$2,315,881
4600009715	DWR-IRWM- DAC Cts	08/16/11-09/30/2016	$2,201,026
00T92401-0	EPA-Flood 2.0 Resilient Habitats	07/01/12-12/01/2015	$1,552,059
00T97901-0	EPA-Greener Pesticides	09/01/12-10/31/2014	$250,000
U59232-0	SGC_Urban Greening-EC3	08/01/12-12/30/2015	$717,692
ASC 1034	ASC 1034-WAPP Support	07/01/12-11/15/2013	$57,000
12-415-550	SWRCB_GreenPlan-Prop 84	0/01/13-11/30/15	$597,901
CE00T47801-3	EPA-SFEP-NEP FY 13-14	12/01/13-09/30/14	$512,000